Volunteer Firemen

JULY

1941

NATIONAL FIRE PROTECTION ASSOCIATION
INTERNATIONAL
60 Batterymarch Street Boston, Massachusetts

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Volunteer Firemen

Volume 8 Number 7

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THE cover picture this month (*Acme*) shows the $5,000,000 fire which swept the Jersey City waterfront on May 31. It is said that employees admitted fighting the fire for more than half an hour before calling the fire department.

AS dangerous as sabotage may be to our defense efforts, there is some question as to whether it can compare with just plain neglect of common-sense fire protection precautions as a destructive force. A case in point was the fire last month in the Wheeling Machine Products Company plant at Wheeling, West Virginia. The plant was making mill and factory supplies including special nipples, sockets and fittings. According to a report from Fire Chief Edward T. Rose, of Wheeling, there did not seem to be much thought of fire safety at the plant. There were no fire doors or fire walls. The few extinguishers were useless in a fire of such magnitude. A watchman was employed but apparently without adequate supervision, as the building was almost completely involved in fire when the fire department was called. The only hydrant at the plant was within ten feet of the burning building. Four lines were taken from this hydrant but one of these lines had to be used to keep the hose from burning. The next nearest hydrant was 4,300 feet, or nearly a mile, away and two engines were required to relay water from this hydrant. The building was on the bank of the Ohio river but no approach had been prepared for pumpers so this inexhaustible supply could not be used. A 30-inch water main passing the building could have supplied all the pumpers in the Wheeling Fire Department had sufficient hydrants been installed. Thus, regardless of the cause of the fire, this $300,000 loss may be charged up to failure to observe elementary fire protection precautions essential in either peace or war time.

DEPENDING upon chance discovery of fire by outsiders is a regular but needless cause of big fire losses. On the other hand, automatic sprinklers and automatic fire alarm equipments take the gamble out of fire protection and give the fire department assurance that they will be called in time to make a good stop.

Experienced fire department officers often say, "The public is not fire conscious. Fire is not in their thoughts. Consequently many persons overlook such obvious warning signs as heat and smoke." A blaze that illustrates the seriousness of failure to call the fire department upon the first sign of fire is reported by Chief Engineer John H. Lennox, of the Camden, N. J., fire department. It may be recalled that Camden suffered one of the largest conflagrations of the year 1940. It might be expected that the residents of that city would now be alert to signs of fire. Nevertheless, a woman living on Clinton Street adjacent to a large market and dry goods building was awakened by a cracking noise. She arose to investigate but could not determine the cause so returned to bed. Later she smelled smoke but still gave no warning to the fire department. Several hours later an off duty fireman discovered the fire. Fifteen streams including three wagon guns were needed to control the blaze which due to the delayed alarm caused a loss of $86,000.

LAST month the Illinois legislature passed and sent to the governor a bill to control fireworks in that state along the lines of the N.F.P.A. model fireworks law. Illinois is thus the fifteenth state to enact this type of legislation. Approximately 63 million persons or 48 per cent of the population of the United States are now protected by the model fireworks law. Of the ten largest states in the Union, six have passed the fireworks law.

LAST month the Volunteer Firemen's Section had its largest new enrollment in nearly two years. Seventeen departments with 167 men joined for the first time. Forty departments with 889 men renewed membership. This makes the total enrollment 732 departments and 14,885 men. The following departments are newly enrolled:

Bay Shore Volunteer Fire Department, Bay Shore, California.

Cheswold Volunteer Fire Company, Incorporated, Cheswold, Delaware.

Douglas Fire Department, Douglas, Georgia.

Glen Ellyn Fire Department, Glen Ellyn, Illinois.

Polo Fire Department, Polo, Illinois.

Bethlehem Fairfield Shipyards, Incorporated, Baltimore, Maryland.

Medfield Fire Department, Medfield, Massachusetts.

Baldwin Fire Department, Baldwin, Michigan.

Union Volunteer Fire Company, Union, Missouri.

Hackettstown Fire Department, Hackettstown, New Jersey.

Espanola Volunteer Fire Department, Espanola, New Mexico.

Pioneer Engine Company No. 1, Ellenville, New York.

Farmville Fire Department, Farmville, North Carolina.

Roanoke Rapids Fire Department, Roanoke Rapids, North Carolina.

Trilby Volunteer Fire Department, West Toledo, Ohio.

Garrettford-Drexel Hill Fire Company, Drexel Hill, Pennsylvania.

Kiel Fire Department, Kiel, Wisconsin.

A REVISED estimate of U. S. fire losses for 1940 has been released by the National Board of Fire Underwriters. The total loss for last year was placed at $286,491,347, or $2.18 per person. This figure is based upon records of the Board's Actuarial Bureau, with thirty per cent added to cover unreported and uninsured losses.

The estimated U. S. fire loss for May, 1941, is $25,637,000. This figure is based on notices of incurred loss received by companies members of the Board, plus an allowance for unreported and uninsured losses. Losses for the first five months of 1941 are $11,553,000 less than the losses for the same five months last year. The following table shows the losses for the first five months of both 1940 and 1941.

	1940	1941
January	$36,260,650	$26,470,000
February	34,410,250	26,102,000
March	29,788,800	31,471,000
April	26,657,190	29,330,000
May	23,446,590	25,637,000
Total 5 months	$150,563,480	$139,010,000

How It Feels TO FIGHT FIRE UNDER AERIAL ATTACK

Lewis Partington, auxiliary fireman of Coventry, England, related his experiences to an audience attending the N.F.P.A. Annual Meeting in Toronto. Part of this talk is reproduced here.

COVENTRY lies ninety miles north of London or approximately in the middle of England. Up to last August the 260,000 people of Coventry had the idea that because they lived in the middle of England, and the city of Coventry was mist-covered at night, the raiding planes could not find it. They were laying bets that it would not be bombed.

Last August "Jerry" proved to us that we were wrong. From August to November we had bombing raids three nights a week. On the night of the 28th of August my wife and I were just finishing supper when the warning sirens sounded. I made my way to my post of duty, standing by at the hospital where there were approximately two thousand people lying helpless. The authorities had assigned nine of us to the hospital to be on the spot in case of a raid.

While I was making my way down to the hospital, the "Jerries" started dropping parachute flares. When I arrived at the hospital I started the two auxiliary pumps and while I was doing this the bombs started dropping. There was nothing else to do so I dropped flat and waited until the bombs had all exploded. As soon as I counted six bombs I jumped up and ran around from my position to the highest point beyond the hospital and had a look around to see whether or not the hospital had been struck. The hospital was all right but I saw the debris shooting high into the sky beyond the hospital, which I judged by its position would probably be my home.

Forgetting my duty as a fireman I dashed over to my home, which I found in ruins. I did not know what to expect; I could smell gas and the water was beginning to seep over the street from the burst mains. I found my family safe amidst the ruins, and after taking them to a house that was not severely damaged, I ran back to the scene of the bombing.

This raid took place so early in the evening that quite a number of people were caught in the streets. I did what I could for them, like using my belt as a tourniquet, and so on, and waited the arrival of the ambulance and first aid parties. After the casualties were taken away I returned to the hospital and stayed on duty until the all clear next morning. That was my first air raid. From then until the night of the "blitz" we were kept busy practically every night by either single raiders or just a few.

This Auxiliary Fire Service was started in 1937 but I did not become interested in it until March, 1938. I was accepted for the service and became an Auxiliary Fireman Pro Tem. We went through an initial training period which was supposed to have taken 26 weeks, but before the period was up, the Berchtesgarten crisis of September, 1938, came along. Everything was speeded up then, and when we had finished the preliminary course we were granted our badges and went on to further training. Things finally settled down and we carried on quietly for another twelve months, during which time we crammed in as much practical training as possible and became familiar with the equipment.

When the war broke out we had on hand about 50 per cent of the equipment necessary and the rest was rushed along in the first few weeks after hostilities began. At the outbreak of war certain of us were asked to leave our civilian jobs and work full time with the regular brigade. I was one of these and I carried on for about six weeks. We did the sandbagging for the protection of the fire station and built water tanks to hold 5,000 gallons of water as a static supply, but when it came to polishing brass and mopping floors I decided that I had had enough. By Christmas time nothing of significance happened so I obtained my release as a full-time man to go back on armament work.

Partington addressing N.F.P.A. Meeting.

In England most plants have their own fire-fighting service, probably twenty or thirty men trained in that type of work. At the outbreak of war there was organized an industrial co-operation scheme between the plant fire brigades and the city brigades and the auxiliary brigades, so while at work I was to collaborate with the plant fire brigade, but if the raid did not occur until I was at home I went to my auxiliary station.

TO give you some idea of the equipment provided, after the preliminary course of 26 weeks, we were fitted out with a uniform, trousers, hat, axe, etc. At the outbreak of war they gave us rubber boots and army respirators, and we began to think something might happen then. In August we had raids for five consecutive days, and as we were working in the plant during the day, that did not leave us much time to rest. Still nothing of great significance happened. The night before we were bombed I was moaning to the boys, "When is it going to happen, when are we going to have a job?" and the very next night "Jerry" dropped one on my place!

Every day you went to work and another of your pals lost his home or one of his kiddies had an arm blown off, or he lost his wife, and it was getting a little tough, but it was nothing compared to the "blitz." All I can say is that it was hell on earth, just one plane after another all night long for eleven hours. Within ten minutes or so of the first bombs there was a ring of fires around the city. Within an hour the water mains were burst and all you could rely on for water was a pool and the canal, and it was impossible to relay the water very far from those supplies. Quite a number of the tanks we erected received direct hits and were put out of service.

It was only a matter of 300 miles from the French coast to Coventry, and the first bombers that came over dropped their bombs and went back for another load. They brought them back the next morning about six o'clock and delivered them with the milk.

On the night of the "blitz," over 30,000 homes were destroyed, so you can perhaps imagine what it was like. Some people were in their shelters but others were not. Some people had a refuge room built underneath the stairs but if a direct hit was scored it was just too bad. It was estimated, a week after the "blitz," that 500 people lost their lives during that one night.

Both explosives and incendiary bombs were used in the attack. First of all the flares came down and then a shower of incendiary bombs, high explosives, and more incendiary bombs, and so on.

I had a young brother who was also an auxiliary fireman. He was at work the night of the "blitz" and he went on duty as an auxiliary fireman. He stayed on duty all that night and all the next day until late in the evening. When the officer in charge saw that he was exhausted and suggested that he go off duty, have a rest, and report back the next day. He made his way home through the ruins, and when he got there he did not have a home; his wife was gone, his home was gone, and everything else was gone.

THE methods used to put out incendiary bombs varied with the circumstances. If it were in a private dwelling you would probably use sand and a bucket and shovel. You cover it with sand and then shovel it up and put it in the bucket and then wheel the bucket out, tip it upside down in the garden and leave it to burn itself out. If it were on a roof or between the roof and the rafters where you could not get at it you would use a stirrup pump. However, if it dropped in a factory it would come through the glass roof and probably land on the floor. In a plant there is machinery, of course, but machinery is not particularly flammable, and unless the incendiary landed in some oil you had very little trouble. If it dropped on the floor, the plant brigade would turn a hose stream on it and run it into a corner, and in nine seconds it was out. There is one precaution you must take, however, when attacking an incendiary bomb in that way, and that is that you must not come within thirty feet of it, because when you put a solid jet of water on it, it breaks up into small pieces and splutters and flies around. With a hose stream you can chase the bomb to the wall and then put it out. There is nothing to be afraid of, unless it explodes. If you have not any sand or water, what is to be done then? One came down onto our fire pump. A pal of mine hit it with his hat and smashed it against the wall.

N. F. P. A. Survey Shows Large Part of Municipal Fire Apparatus Over-Age

OF 3,887 pumpers and ladder trucks in service in 365 United States cities of 20,000 and over population, 2,016, or 51.9 per cent, are over 15 years old, according to a survey made recently by the Executive Office of the National Fire Protection Association. While such apparatus might be valuable as a reserve, it cannot be expected to meet the severe requirements of active fire defense and heavy prolonged usage.

Apparatus which is more than 15 years old is outmoded, first as a truck and secondly as fire fighting equipment. As a truck, a piece of apparatus which is 15 or more years old may be compared in some respects with an automobile of the same age. Few automobiles or trucks of such age remain on the roads today. Fire apparatus which is more than 15 years old may have two-wheel brakes, solid rubber tires, and many other features which make the apparatus entirely inferior and undependable. The good or bad condition of its paint and nickel plating is little measure of its worth.

From the standpoint of fire fighting, apparatus which is more than 15 years old may lack many of the improvements developed within that period. Its original appliances may have become worn and undependable.

On May 2 the N.F.P.A. Executive Office sent a questionnaire to the fire chiefs of the 510 cities of 20,000 or more population in the United States, requesting information as to the age and number of fire department pumpers and ladder trucks in service in their communities. Returns had been received at the end of May from 365 cities, or 72 per cent of the total. Although returns continue to come in, this number gives an accurate picture of the situation.

A total of 3,887 pumpers and ladder trucks are in service in the 365 cities reporting.

1,012, or 26.0%, are 16 to 20 years old
1,014, or 25.9%, are over 20 years old

2,016, or 51.9%, are over 15 years old

Pumpers.

Of 2,869 *pumpers* in active service in 365 cities:

760, or 26.5%, are 16 to 20 years old
736, or 25.6%, are over 20 years old

1,496, or 52.1%, are over 15 years old

Of 365 cities reporting, 38, or 10.4%, have no pumpers in service that are under 16 years old. Other cities numbering 169, or 46.4%, have less than 50% of their pumpers under 16 years old. In other words 207, or 56.9%, of the cities report that less than half of their apparatus is under 16 years old.

Ladder Trucks.

Three hundred and fifty-five cities reported 1,018 *ladder trucks* in service. (Ten cities have no separate ladder trucks in service.)

252, or 24.7%, are 16 to 20 years old
268, or 26.3%, are over 20 years old

520, or 51.0%, are over 15 years old

Of 355 cities having ladder trucks, 100, or 28.2%, have no ladder trucks in service that are under 16 years old. Other cities numbering 96, or 27.0%, have less than 50% of their ladder trucks under 16 years old. In other words, 196, or 55.2%, of the cities having ladder trucks report that less than half of this apparatus is under 16 years old. Of the 130 cities having only one ladder truck in service 57 reported the truck over 15 years old.

While the information was not specifically requested, 15 chiefs reported a total of 17 pumpers and 11 ladder trucks on order or appropriated for. Of the 3,887 pieces of apparatus reported in service, a total of 15 pieces are specifically indicated as combined pumper-ladder trucks. These have been included in the tabulation in whichever class of service they were listed by the chief making the report.

Obviously, much new fire apparatus is going to be needed by the majority of American fire departments if an adequate fire defense is to be maintained. Many cities are now willing to make the necessary apparatus purchases. Others are beginning to see the need for new apparatus. But now, another obstacle stands in the way—priority restrictions. The materials which are sorely needed for the construction of new fire apparatus cannot be obtained unless officials at Washington appreciate the importance of adequate fire apparatus for home defense and grant priorities to fire apparatus manufacturers for materials essential to the manufacture of fire apparatus.

As a result of this situation, the N.F.P.A. at its 45th Annual Meeting in Toronto, the week of May 12, passed a resolution in which the governmental authorities were asked to grant fire apparatus manufacturers defense priority. This request was made on the basis that adequate, modern fire fighting equipment is necessary for fire defense in the national emergency.

This $1,000,000 fire in Philadelphia burned valuable lumber and threatened the important shipyard buildings (left). It illustrates that there are things other than sabotage to consider in protecting plants important to defense. Sabotage or no sabotage, this was a large loss only because a fundamental principle had been ignored in the concentration of so much material to burn in one place. Such lumber must be stored in piles of reasonable size with spaces between the piles so that firemen may have access for fire fighting.

WHAT WAR EFFORT MEANS

More Hazard— More to Burn

THE war and our defense effort are doing things to the cities and towns in which we live. There are new and expanding industrial plants; warehouses are filling up with things to burn.

The fire department cannot ignore this situation. Since the first of the year there has been a long list of disastrous fires. It is to be noted that these have occurred not only in large cities but in small towns as well. The increased industrial activity is reflected in the fact that there are 22 fires on this list as compared to 18 on a similar list for last year up to the same date.

What were some of the factors that caused these large losses? A study shows that some of the reasons may be listed as follows:

1. Unreasonably large concentration of combustibles.

2. Fire fought by employees when fire department should have been called.

3. Lack of supervision of a building under construction.

4. Watchmen inadequately instructed in the importance of properly calling the fire department.

5. Supervision of valves on lines furnishing water for fire protection was lacking or this supervision was not properly carried out.

6. Protective features such as fire walls and sprinklers had been removed.

7. Unusual concentration of a valuable stock.

8. Large-area buildings such that a large loss was practically inevitable.

9. Protection for special hazards badly handled.

10. Water supply not designed to fit the fire danger.

11. Important buildings or structures were given inadequate fire safety consideration.

12. Management unconvinced of need of and unsympathetic to fire protection.

Ever since there was a threat of war to this country it has been popular to attribute these large fires to sabotage. The factors listed above are sufficient to explain large losses without dragging in sabotage. Investigation of some of the more recent fires among those that have occurred this year has not proceeded far enough so that their causes can be definitely established. Preliminary reports indicate that no new factor such as sabotage is as yet at work.

There are many communities which have one industrial plant which by itself is relatively as important in the national defense picture as all the rest of the community. Almost any city has warehouses, industrial plants and other occupancies in which may occur fires relatively as serious as any of those on this list of big fires which have occurred so far this year.

The first thing to do, perhaps, if you haven't already done it, is to make a list of those properties in your community to which the fire department will give special attention. On the list

Some Large Loss Fires

Since January 1, 1941

Loss figures are preliminary estimates only in most cases and are subject to correction.

Gibson City Canning Company, Gibson City, Ill. January 10, 1941. Loss: $300,000.

Hangar, United Air Lines, Salt Lake City, Utah. January 12, 1941. Loss: $275,000.

Administration Building, Naval Operating Base, Norfolk, Va. January 26, 1941. Loss: $275,000.

Silver Fleet Motor Express Co., Chicago, Ill. January 31, 1941. Loss: over $250,000.

Burnett Motor Company, Portland, Oregon. March 6, 1941. Loss: $288,294.

Bienville Warehouse, New Orleans, La. March 12, 1941. Loss: $1,500,000.

Barnett Foundry, Irvington, N. J. March 12, 1941. Loss: $1,000,000.

Gulf Refining Company, Jefferson Parish, La. March 18, 1941. Loss: $400,000.

A. Hollander & Son Limited, Montreal, P. Q. March 18, 1941. Loss: $600,000.

Plymouth Rubber Company, Canton, Mass. April 2, 1941. Loss: $500,000.

Traders Cotton Compress, Altus, Okla. April 9, 1941. Loss: $261,202.

Conflagration, Marshfield, Mass. April 21, 1941. Loss: $750,000.

Conflagration, Manila, P. I. May 5, 1941. Heavy loss.

Four Blocks of Pier Sheds, Los Angeles, Calif. May 14, 1941. Loss: $500,000.

Lear's Lumber Yard and ten dwellings, Philadelphia, Pa. May 15, 1941. Loss: $1,000,000.

George A. Bound mill, Salisbury, Md. May 17, 1941. Loss: $750,000.

National Waste Company, Philadelphia, Pa. May 24, 1941. Loss: $500,000.

Doughnut Corporation of America, Ellicott City, Md. May 27, 1941. Loss: $2,000,000.

Lawrenceburg Roller Mills plant, Lawrenceburg, Ind. May 29, 1941. Loss: $750,000.

Waterfront Conflagration, Jersey City, N. J. May 31, 1941. Loss: $5,000,000.

Clyde-Mallory Line's terminals (2), Jacksonville, Fla. June 8, 1941. Loss: $675,000.

Wheeling Machine Products Company, Wheeling, W. Va. June 8, 1941. Loss: $300,000.

would be such properties as the following:

Industrial properties
Piers and wharves
Warehouses
Large buildings of multiple occupancy, both manufacturing and mercantile
Electric light and power stations
Gas works
Lumber yards
Saw mills
Oil refining and storage

The special attention given these properties should be the most careful and competent available. If possible, all matters pertaining to these properties should be personally handled by the fire chief. So far as possible, these large properties should be encouraged to maintain their own protection, including private fire brigades.

Where a chief of a fire department is required to delegate attention to one of these large plants to a battalion chief or company officer, he might find helpful a blank such as that illustrated herewith.

Note that this blank is not for the purpose of making a detailed survey on the building. The blank is not for making a report to anyone except the chief of the fire department. The information is confidential. There is considerably more information asked for on the blank than an officer would be expected to report once a week or every day, as the case may be, but the notations on the blank are put there to show the sort of information that would be useful if passed along regularly to someone like the chief who wants to keep in day to day contact with conditions at the property.

For example, it is important that if a large amount of some new raw stock or material is moved in, the fire department know about it immediately. The particular material may have characteristics which make fire fighting dangerous. In any case, the fire department should have an opportunity to plan its fire fighting operations in advance.

What is done to prevent large loss fires is necessarily done locally. Plant managers and those in charge of warehouses will get guidance in fire matters from insurance advisers, in some cases from their own fire protection staff, and in others from Army and Navy plant inspectors. These managers will appreciate additional attention from the fire department because, after all, if fire comes, they turn to it for help.

Big fires are not necessary. They cannot happen unless someone slips up. The things that need to be done are not spectacular, but they involve a day to day vigilance.

District of Company No. _____ Battalion District _____

Name and location of property _____ Date _____

CONFIDENTIAL. Form for use of Company Officer reporting to Battalion Chief or Battalion Chief reporting to Chief. Furnish copy to Chief of Fire Prevention Bureau. Report to be made daily where conditions warrant, and not less frequently than once a week. Questions indicate the sort of comment desired under each of following headings.

REPORT TO CHIEF OF FIRE DEPARTMENT

1. **Comment on Plant Protection.** When was last visit made to this property (not necessarily the last complete survey, but any spot-check which has been made to see that fire safety routines are being observed)? Did you look at at least a few of the following items: Hydrants? Valves? Hose Stations and Hose Houses? Extinguishers and any special extinguishing equipment? Fire Doors? Water level in tanks? Comment on adequacy of water supply

_____

_____

_____

2. **Comment on Private Fire Brigade.** Comment on the organization and operation of the brigade. Does the fire brigade chief report to a principal executive of the company rather than to an executive principally interested in production? Comment on training. When was last drill session of brigade held? What did they cover? Did you attend?

_____

_____

_____

3. **Comment on Watchmen.** How many watchmen are there? Do you know them? How often are rounds made? Do they keep records? When did you last check their work during hours when plant is shut down? What instruction are you giving them, particularly on procedure in emergency and how to call fire department?

_____

_____

_____

4. **Comment on Supervision of Valves in the Fire Protection System.** What method is used for checking on whether valves are open or closed: "red-tag" system, central station supervisory or other method? Would it be possible for a valve to be closed or only partly open? Who is notified when a valve is closed?

_____

_____

_____

5. **Comment on Attitude of Management.** Is management doing all it might? Comment on such matters as their attention to housekeeping, the high piling of stock and obstruction of fire doors.

_____

_____

6. **Comment on Stock.** Is there an unreasonable concentration of combustible stock, or stock with unusually high value, at any point in the plant, either as raw material, stock in process or finished goods? Is a material increase in the amount of such stock likely in the immediate future?

_____

_____

_____

On each of the above items have you told what next needs to be done and who is to do it?

Signature _____

Here is a form which may help in keeping day to day contact with conditions in large and important properties. It is not a regular inspection or survey form as it would be obviously impractical to make a complete inspection at frequent intervals. On it, however, can be reported highlights of the situation at the plant so that prompt action may be taken to correct any dangerous condition. Blanks similar to the above can be produced by your own printer or they may be obtained from the N.F.P.A. at 25 cents per pad of 50 sheets.

We cannot afford to burn needed foodstuffs and munitions. Alertness of every fire department and day to day attention to unspectacular details is the way to prevent large fires.

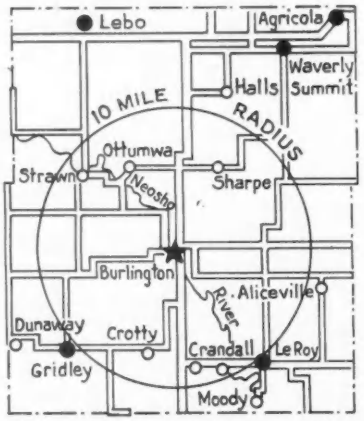
ORGANIZED FIRE PROTECTION FOR RURAL AREAS

FOR years Americans who may have laughed at the fatalism of Oriental peoples in not resisting "fate" or misfortune, have been guilty of a worse form of fatalism through which they have stood idly by and done almost nothing while fire has taken an annual toll of $100,000,000 in property, as well as countless lives, from the more than six million farms and rural homes in the United States. The fire record in the rural areas of Canada has been likewise severe.

There is no particular sense to the idea that farm properties, because they are too scattered to make possible their protection by paid fire departments, must be allowed to burn to the ground every time a fire gets beyond the control of the meagre private fire fighting equipment that farmers may have available. The N.F.P.A. Committee on Farm Fire Protection, under the chairmanship of Dr. D. J. Price of the U. S. Department of Agriculture, Vice-President of the N.F.P.A., has for many years vigorously attacked the rural fire waste problem. It is constantly seeking to carry the knowledge of fire prevention and protection to owners and occupants of rural property. This committee was also the author of the N.F.P.A. pamphlet Rural Fire Departments, through which it has encouraged the extension to rural areas of the protection that can be obtained through organized and properly equipped volunteer fire departments.

For many years town fire trucks have needlessly stopped at city limits while the property and the prosperity of the farmers who trade with the local merchants was destroyed by fire. This has occurred in spite of the fact that motor equipment has an effective range of five to ten miles or more over improved roads. Such problems as organization, financing and liability, where not properly disposed of, have appeared to furnish ample excuses for stopping fire apparatus at corporation lines. Farm property owners in the past have not always been in a position to sponsor rural fire departments no matter how desirable such organizations may be from their point of view.

Now, however, some of the difficulties which have appeared to be blocking effective fire protection in rural areas are being effectively removed. Many volunteer fire departments have proven that rural fire protection is not only practicable but desirable from the point of view of both the volunteer department and community extending the outside protection. Many volunteer fire departments do not get a great deal of fire fighting experience within their own corporation limits. Thus an opportunity to give service to rural areas is a means of getting enough fire calls to keep the department on its toes.



Map of Coffey County, Kansas. Villages shown in black have populations of over 250 persons. From the county seat at Burlington, where the county fire truck is to be stationed, paved or improved roads radiate to all sections of the county making county-wide rural fire protection possible.

It has been found that rural residents appreciate fire department service and are glad to give their support. The cost to each individual property owner is usually a modest sum. Many volunteer departments rely upon the patronage given by rural residents to the departmennt's money-raising activities to finance rural fire service. Other departments charge each farm a small annual fee.

Some states have passed laws regulating rural fire protection. In Maryland, for example, special taxing districts have been established from time to time by the legislature to permit the support of volunteer fire companies. In Washington and Oregon state laws permit the organization of rural fire protection districts upon the petition of the voters in the districts. Oregon laws provide that protection can be organized locally or may be purchased from the nearest existing fire department.

The Oregon rural fire protection laws further provide that all lands outside of incorporated cities and towns shall be zoned as either forest and agricultural lands, or other rural lands. The State Board of Forestry is to purchase protection for the forest and agricultural lands and assess the cost at an amount not to exceed 5 cents per acre annually. Other rural lands are to receive their fire protection through the county commissioners who are to organize or purchase protection for these areas.

ONE of the drawbacks to furnishing outside protection has been that the majority of volunteer fire companies have only one piece of motor apparatus. They hesitate to send their equipment out of town for fear a fire may occur at home while the apparatus is away. In some instances this difficulty has been overcome by mutual-aid agreements between neighboring fire departments where departments are located near enough to cover each other. In more instances volunteer fire departments have purchased a second truck for use at rural fires. The money is usually obtained by soliciting the support of the rural residents who thus receive protection.

Nevertheless, in spite of the initiative of many individual volunteer fire departments, millions of farms and other rural properties are without needed fire defense. In many sections farm fire losses are as high as 85 cents loss for every dollar valuation exposed to fire. No city or town would tolerate such an appalling condition. As rural areas see how easy it is to obtain organized fire protection they too are demanding security from fire.

Undoubtedly, California is the state that has made the greatest strides in rural fire protection. County volunteer fire department organizations protect a large part of that state. This protection was described in VOLUNTEER FIREMEN for August 1937. An organization known as the California Rural Fire Institute draws up suggestions for the organization of rural fire departments and the equipment of rural fire trucks.

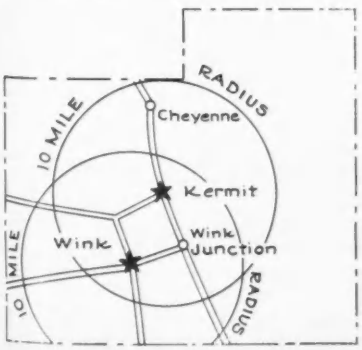
RECENTLY two other states have taken steps to permit county-wide fire protection for rural areas. The last session of the Kansas legislature passed House Bill 438, permitting Coffey County to organize a county-wide volunteer fire department under the control of the county commissioners. The county fire department is to be financed by an annual tax on all taxable property in the county in an amount not to exceed one-half mill,

or approximately $1.00 per $2,000 assessed valuation. Burlington, with a population of almost 2,400 persons, located near the center of Coffey County, has an active fire department. A county-owned rural pumper carrying 300 gallons of water is to be stationed with the Burlington Fire Department. (Member N.F.P.A.) This will give the fire department the benefit of an additional piece of apparatus in return for manning the county equipment at rural fires.

The law permitting the organization of the Coffey County fire department provides that "the country shall not be liable in any way for the failure of the fire department to attend a fire, or to put out a fire, or for any other reason, but the department, subject to the conditions of this act, shall make a reasonable effort, road and weather conditions permitting, to attend fires within the county." The law further provides that the fire department shall have the right of way on public highways and provides for the punishment of persons interfering with firemen in the discharge of their duties.

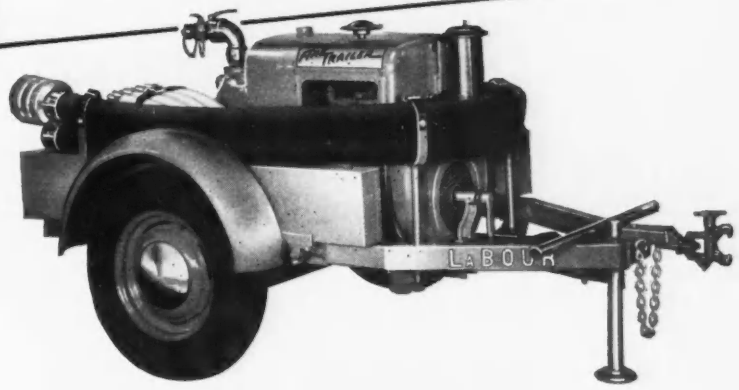
On May 24 of this year Governor O'Daniel of Texas signed House Bill 262 making it possible for County Commissioners' Courts to purchase fire fighting equipment or contract for fire protection of rural districts. The bill also provides that no city or town shall be held liable for acts of any employees while engaged in fighting fires outside the city limits. Money for the purchase of fire apparatus shall be authorized only by a majority vote in a county-wide election.

Winkler County on the New Mexico border is the first county reported to have taken advantage of the new Texas law. The Winkler County commissioners have called for bids for the purchase of two complete fire trucks. These are to be stationed at the towns of Kermit and Wink and will cover the entire county as shown on the accompanying map.



Winkler County, Texas, where a county fire department is being organized. Bids have been asked for fire apparatus to be stationed at Kermit and Wink to cover the entire county.

A NEW LABOUR FIRE TRAILER



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Centrifugal Pump

Delivering more than 150 gallons per minute against a total pressure of 110 lbs., this new Type WFI LaBour Fire Trailer incorporates an improved pumping unit driven by an air cooled engine. The pump is inherently self-priming, requiring no attention or manipulation whatever, and being of the centrifugal type with an open impeller, it is next to impossible to clog. Dirty water cannot injure the pump.

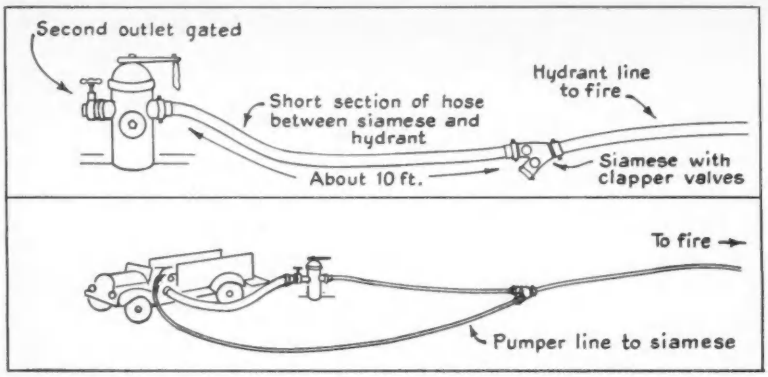
The unit can be quickly attached to any passenger car to be drawn to the fire. It carries 24 feet of suction hose and 500 feet of discharge hose, and is arranged so that one or two streams can be used. May be used as a booster from a hydrant or another pump, adding 110 lbs. to the pressure put into it, or will draft direct from any pond, stream or cistern. Send for your copy of Bulletin 47-A for full details.

LaBour Fire Trailers can be handled by one man when necessary. Pump and engine require no attention after starting, leaving man free to direct the stream.

LABOUR PUMPS

THE LABOUR COMPANY, INC., ELKHART, INDIANA, U. S. A.

BACKING UP A HYDRANT LINE


Second outlet gated
Hydrant line to fire
Short section of hose between siamese and hydrant
About 10 ft.
Siamese with clapper valves
To fire
Pumper line to siamese

WHEN using a hydrant-to-fire layout it is often an advantage to get to work at once with a hydrant line without waiting for the pumper to get back to the hydrant to boost up the pressure to the desired point. In many cases when the pumper has returned to the hydrant ready for use it is important not to interrupt the supply to the hydrant line even though pumper pressure is needed. Some fire departments overcome this problem by the simple expedient of carrying an ordinary siamese connection with clapper valves, in the line that is to be dropped when taking the hydrant. This siamese connection would be placed preferably at the end of a short section of hose that would bring it about ten or fifteen feet from the hydrant when in use. It may be rolled in a doughnut roll connected to the regular load or otherwise carried so as not to inconvenience the man dropping off to make the hydrant connection. Drillmaster E. A. Stiener of Long Beach, California, suggests that the short length of hose is not necessary as it is possible to place the siamese directly on the hydrant outlet. However, most fire departments using this evolution do use the short length of hose to place the siamese ten or fifteen feet from the hydrant.

In carrying out the evolution, the hydrant man drops off the pumper with the hose butt. The line is attached to the hydrant in the usual manner and the second hydrant outlet is gated for use by the pumper when it returns to the hydrant after laying the line. As soon as the hydrant connections are made, the hydrant line may be placed in operation with direct hydrant pressure supplying the stream. In most cases hydrant pressure usually will provide a fairly good initial stream before other lines begin to draw upon the available supply. When the pumper returns, or another pumper arrives at the hydrant, a 4½-inch by 2½-inch reducer is placed upon the gated outlet if a standard hard suction is to be used. If not, a length of 2½-inch or 3-inch hose may be used to supply the pumper.

While the pumper is being connected to the hydrant, a 50-foot section of hose is connected to one of the pumper discharge gates and is run to the idle intake of the siamese connection. Then when the pumper is placed in operation and the proper discharge gate is opened, the original hydrant line is given the desired pumper pressure.

The above method is the simplest way of carrying out this evolution which is used with several variations by different fire departments. Many fire departments provided with ample hydrant gates, follow the desirable practice of gating both hydrant outlets when making the first hydrant connection. The use of two gates or shut-offs at the hydrant makes it possible to shut off the initial hydrant supply line when no longer needed without the use of a hose clamp. This line may then be used to supply a second pumper or to give a greater supply to the first pumper if obtaining its supply through a single line of 2½-inch hose. Where hydrant outlets are provided with independent gates it is not necessary for the fire department to place gate valves on the outlets.

Other departments use a gated wye when making the first hydrant connection for this evolution. Chief J. Ray Pence of Stillwater, Oklahoma, points out that this method is faster because the wye gives control over both the direct hydrant stream and the pumper supply with a single connection. Thus it is not necessary to gate another hydrant outlet. The use of a gated wye also makes it possible to use this evolution in sections protected by non-standard hydrants having but a single outlet.

Special "four-way" hydrant connections are available to permit a pumper to back up a hydrant line without shutting down the supply. Such valves are not standard items on most fire trucks, whereas siamese connections with clapper valves are carried by many fire departments.

The use of a siamese connection to permit a pumper to back up a hydrant line is not limited in usefulness to situations where only one pumper is used. In some cases a booster truck, hose truck or even a ladder truck carrying hose may reach a fire first and drop off a hydrant line having a siamese inserted. A pumper upon arrival boosts the pressure.

It should also be mentioned that this evolution may be used to put two pumper lines in service very quickly. As already indicated, the first line (having the siamese connection installed) is laid hydrant-to-fire and put in operation. When returning to the hydrant the pumper lays a second line fire-to-hydrant. Where the pumper has a divided hose body carrying one side loaded to lead off with the male coupling, double male or female couplings are not required for the second or reverse line. On the other hand, where all hose is carried for the hydrant-to-fire layout a double male coupling would be used to attach the nozzle to the second line and a double female coupling is used to connect to the pumper outlet.

Acknowledgment is made of helpful suggestions in the above article made by Chief J. Ray Pence, Fire Department, Stillwater, Oklahoma, Secretary, International Association of Fire Department Instructors; Chief Engineer Harry K. Rogers, Fire Prevention Department, Western Actuarial Bureau; Assistant Chief Henry Haddock, Drillmaster, Fire Department, Lynn, Massachusetts; and E. A. Steiner, Drillmaster, Fire Department, Long Beach, California.

Salaries and Hours Worked In Municipal Fire Departments

THE United States Department of Labor recently published two additional pamphlets in the series known as Bulletin 684, covering salaries and hours of labor in municipal fire departments. Volume IV covers West North Central Cities and Volume V reports on South Atlantic Cities. These volumes are a part of a series of nine regional studies and include detailed information on salaries and hours of labor in effect on July 1, 1938.

According to Volume IV, twenty-seven fire departments in the states of Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, and South Dakota, employed a total of 4,265 persons whose annual salaries totaled $8,327,000. Volume V reports that thirty-nine fire departments in South Atlantic cities employed 5,818 persons with total annual salaries of $11,104,000.

PUMPERS FOR AIR RAIDS

N.F.P.A. Fire Apparatus Committee Presents Specifications for Auxiliary Pumping Units

MUNICIPAL and fire department officials are interested in knowing what types of emergency pumping equipment may be needed in the United States and Canada to cope with possible fires started by air raids. Accordingly the N.F.P.A. Committee on Municipal Fire Apparatus has prepared suggested specifications for auxiliary pumpers. Following tentative adoption by the N.F.P.A. at the Annual Meeting in Toronto, these specifications have been published in pamphlet form to make them available to communities interested in such equipment.

The report indicates that there are several methods by which emergency pumping units may be obtained. For example, an automobile truck may be used with a pump installed to be driven by the truck motor. Such a unit may be front mounted and direct-connected to the engine or mounted on the chassis and driven by a power take-off from the drive shaft. On the other hand the emergency pumper may be a self-contained unit with its own motor to drive the pump. Such self-contained units may be installed cross-chassis or on the rear of the truck. This type of self-contained unit can also be mounted on a trailer and pulled to the fire by an automobile.

When emergency units are needed, they are likely to be required rather suddenly and in numbers large enough to introduce problems of procurement. This means that some advance attention should be given to the problems involved.

Trailer pumpers such as are used in fire departments in Europe have been advocated as one of the possibilities for this emergency pumping equipment. These were given special study by the Committee on Municipal Fire Apparatus because of their prominence in the minds of many people. It was brought out that the use of trailer pumpers in England is due to special conditions there which are not the same as those in the United States and Canada. Trailer pumpers have been a regular type of fire apparatus in England so it was logical that for emergency use they should employ trailer pumps. English pumps have usually been self-contained units because the typical English automobile engine is a low-powered affair. On the other hand, nearly all American automobiles have an engine large enough to also drive a pump. Current practice in United States and Canada is a pump driven by the same engine that propels the truck.

Self-contained pumping units (engine and pump direct-connected and assembled on skids) are, however, very practical for emergency use as they can be promptly mounted on any truck or on a trailer to make an emergency pumper.

Space should be provided on trailer units for carrying a load of hose. The maximum amount of hose which can be carried on a trailer depends on the type and size of hose but is considerably less than the amount of hose required to serve the pump. This makes it necessary to have additional hose-carrying vehicles accompany the trailer unit to the fire.

Ordinary fire department practice in cities which give fire hose heavy usage calls for the use of a double-jacketed fire hose. In the case of hose for emergency apparatus, it is probable that either single-jacketed or double-jacketed hose, whichever may be available, will have to be used. Reports on the use of fire hose in war emergency situations indicate that a fairly high percentage of loss of hose may be expected. It is probable, therefore, that single-jacketed hose may be sufficient for hose on emergency vehicles. As the space available for carrying hose on a trailer unit is limited it may be desirable to use single-jacketed hose to increase the footage of hose that may be carried.

The N.F.P.A. standard for Auxiliary Pumpers covers the minimum features necessary to provide a reasonably satisfactory unit for pumping water at fires under emergency conditions. The specifications ignore many features which would be essential in a piece of fire apparatus to be put in normal service in a city. It should be kept in mind that it may be good practice for a fire department to buy standard apparatus instead of purely emergency equipment. Such standard apparatus would conform to the N.F.P.A. Specifications for Municipal Fire Apparatus. This would be especially true in the case of cities where much of the present pumping equipment is obsolete or unreliable.

Copies of the Report on Trailer Pumpers and Specifications for Auxiliary Pumpers are available from the N.F.P.A. Executive Office, 60 Batterymarch St., Boston, Mass., at a cost of ten cents per copy.

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When Mr. and Mrs. Ladd, while returning to their farm home with a new auto, ran off a culvert and overturned, killing Mr. Ladd and pinning Mrs. Ladd under the car which was rapidly being consumed by flames—a neighbor of the Ladds, Mr. A. O. Barrett, came to the rescue with his 1¾-gallon Instant and the flames "died instantly." According to the last report from Dealer Frank Tilton of Washington C. H., Ohio, "I am glad to report that hopes are held for Mrs. Ladd's recovery."

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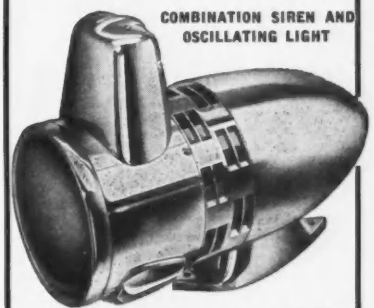

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"SIREN HEADQUARTERS"
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N. F. P. A. Membership

Every member receives this handsome membership certificate.

Membership with unusual advantages is available to fire companies and fire departments through the Volunteer Firemen's Section of the National Fire Protection Association. Here's the simple plan:

INDIVIDUAL membership in the National Fire Protection Association costs $10 per year. The membership plan for the Volunteer Firemen's Section is designed to give each fire company the advantages of N.F.P.A. membership. The fire company, as a member, receives at its headquarters a complete set of all regular N.F.P.A. literature, including the *Quarterly* magazine, as issued. In addition, as a special service to the Volunteer Firemen's Section, each fire company holding N.F.P.A. membership is entitled to have copies of the magazine VOLUNTEER FIREMEN sent to the home addresses of 10 firemen each month. If more than 10 firemen want to receive the magazine, an additional $1.00 should be sent in with the membership fee for each fireman in excess of 10 enrolled.

Because of the large amount of material mailed to members, not less than $10 can be accepted from any company.

State Fire Schools, 1941

2nd Arkansas	July	Little Rock
12th Florida	July 21-25	Daytona Beach
13th Michigan	July 15-18	Ann Arbor
12th Texas	July 20-25	College Sta.
11th West Virginia	July 21-25	Morgantown
7th Wisconsin	Aug.	Madison
4th Kentucky	Aug. 19-21	Covington
Ky. Defense school	July 28-31	Lexington
16th Oklahoma		Stillwater
Instructor training	July 28-Aug. 1	
Instructors' conf.	Aug. 4-8	
Unit training	Aug. 11-29	
11th Washington	Aug. 21-23	Yakima
3rd Pennsylvania	Aug. 25-29	State College
13th Kansas	Sept. 2-5	Lawrence
12th Maryland	Sept. 2-5	College Park
2nd Montana	Sept. 24-27	Polson

TRAINING NOTES

Alabama. The 5th Annual Fire College was held at the University of Alabama, June 2-7, 1941. Two mornings were devoted to study of fire defense.

Connecticut. The first State Fire College was held at the University of Connecticut at Storrs, June 9-12. About sixty-five fire chiefs and drillmasters attended the classes.

Florida. This year the annual State Fire School to be held at Daytona Beach on July 21-25, will include a special course in Defense Fire Service Training conducted by Chief J. W. Just of the University of Maryland.

Georgia. Firemen numbering in excess of 250 from 66 cities, plus a large attendance of members of the Atlanta Fire Department participated in the Georgia State Fire College, a 3-day short course held May 7-9, 1941.

Kentucky. The Kentucky Civil Defense Commission in cooperation with the University of Kentucky and the State Fire Marshal's Office, is sponsoring a state fire college to be held at Lexington, July 29-31.

Minnesota. Nine regional fire schools are to be held throughout the state this summer with a total attendance of more than 2,500 men anticipated. Later in the fall it is intended to hold an instructors' school at the University of Minnesota.

Missouri. The 9th Missouri Central Fire School held under the auspices of the fire department at Columbia, May 28, 1941, was attended by 157 firemen from 63 communities.

Vermont. Twenty-hour measured training courses have been held at Ludlow, Bethel, Essex Junction, Milton, Poultney, West Rutland, and Chester. Courses are planned for Danby, Morrisville, Randolph, and Hardwick. Five fire department instructors are conducting the classes. A teacher training conference is planned for the fall.

NEW TEXTS

"THE Principles of Electricity Applied to the Fire Fighting Service" by W. Fred Heisler, 172 pages. This is the latest contribution of Mr. Heisler to a considerable list of texts prepared for firemen's training classes. Mr. Heisler is Research Specialist in Trade and Industrial Education at the Oklahoma A. & M. College. The text was prepared in cooperation with the Trade and Industrial Division of the State Department of Education. Price $1.00.

THE Dow Chemical Company of Midland, Michigan, has published Bulletin No. DM 43, "Control and Elimination of Magnesium Fire Hazards." This 12 page bulletin contains data on recognizing magnesium hazards, control of fires, machine shop practice with magnesium, grinding practice, magnesium scrap, magnesium fires on combustible surfaces, and general safety considerations.

THE County Fire Commission of Nassau County, N. Y., last month issued an interesting 8 page bulletin "The Fire Service in National Defense."

THE International Association of Fire Chiefs has published, as Educational Bulletin No. 6, an address by President W. Hendrix Palmer of Charlotte, N. C., entitled, "A Defense Program for the Fire Department." This 13 page bulletin may be obtained from International Association of Fire Chiefs, 25 West 40th Street, New York, N. Y,. at a cost of 15 cents.

ANNOUNCEMENTS

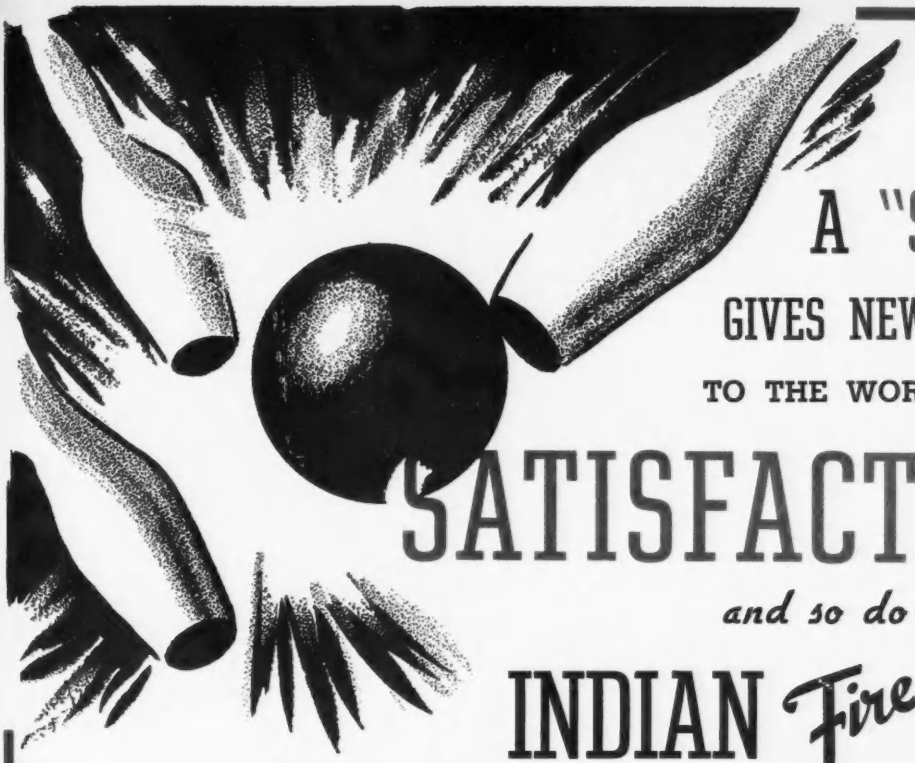
MINE Safety Appliances Company, Pittsburgh, Pa., has issued illustrated bulletin No. DX-5, describing the new Streamlined M.S.A. Firemen's Helmet. It is reportedly available with genuine leather, rubber-cushioned lining; chin strap; detachable ear lugs and shield. The helmet is said to have wide arched side brims, long sweeping rear brim, reinforced crown ridge, and is of laminated bakelite construction.

CHIEF J. R. Gandolfo of Sandston, Va., announces that he and his big combination pumper-ladder truck are available for the protection of any community interested in purchasing motorized fire protection. For twelve years Chief Gandolfo has provided fire protection on a citizens' private subscription basis. Now the county in which Sandston is located is organizing a county-wide fire department so that private apparatus will be no longer needed.

FIRE departments are frequently facing the problem of determining the reliability of hose to withstand pressure or the ability of chemical extinguishers to stand up under the internal pressures generated during use. To meet the need of almost every fire department for a convenient hydrostatically operated test pump, American-La-France-Foamite Corporation of Elmira, New York, announce their new Testall Pump. This pump has separate connections for testing both hose and extinguishers. The pump is rapid in operation and may be easily carried by one man.

For use with a definite test procedure, the Testall Pump has been approved by the Factory Mutual Laboratories of Boston, Massachusetts, for testing extinguishers, chemical engines, hose, and sprinkler systems.

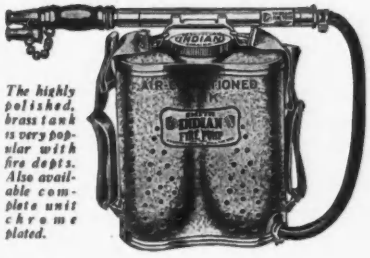
When used for testing extinguishers, the pump flushes the interior of the extinguisher. The testing water flows in automatically and only a few strokes are required to bring the extinguisher up to test pressure.



A "STRIKE" GIVES NEW MEANING TO THE WORD SATISFACTION!

and so do

INDIAN *Fire Pumps*



The highly polished, brass tank is very popular with fire depts. Also available complete unit chrome plated.

INDIAN FIRE PUMP EXTINGUISHERS

put out partition fires, roof and chimney fires, incipient fires, fires from overheated stoves, and all the other Class A fires which cause so much trouble. Five-gallon tank carries on the back or by hand. Brass pump throws powerful pressure stream right to the base of the flame. Fire departments find INDIANS the solution of the smaller fires which make up an average of 70% of their calls. No need to lay hose. INDIANS do the job quickly and cheaply. *Only clear water used.* Water damage is held to a minimum.

Let us send fire department testimonials—they speak for themselves.

HERE'S WHAT FIREMEN SAY:

INDIAN
FIRE PUMPS
"THE MOST VALUABLE ACCESSORY FOR ALL AROUND USE."
"THE BEST OUTFIT I KNOW OF—COULD NOT GET ALONG WITHOUT THEM."
"WE HAVE NOTHING BUT COMMENDATION FOR INDIANS."

You'll really get a thrill out of the way INDIAN FIRE PUMP extinguishers do a job. They are the fastest, easiest, cheapest way to handle 70% of your calls. No chemicals—just clear water. Order Now! INDIANS give you the biggest dollar value of any fire equipment.

Send for Fire Department Circular

D. B. Smith & Company
Utica, N. Y.

Our first experience with the INDIAN FIRE PUMPS was a good test. In answering an alarm we found a section of shingle roof about eight feet square raging with fire. We raised a ladder and one man with the INDIAN FIRE PUMP extinguished the blaze in less than three minutes and did not use over three and a half gallons of water.

The INDIAN worked 100 per cent perfect. We immediately added three more of these INDIANS to our equipment due to the fine work they do.

Very truly yours,
C. E. KEIFER,
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RURAL FIRE DEPARTMENTS

1940 EDITION

A 32 page pamphlet
Price 20 cents

This pamphlet prepared by the N.F.P.A. Committee on Farm Fire Protection contains helpful suggestions for the operation of volunteer fire departments.

CONTENTS

I. Equipment, Apparatus
II. Organization
III. Volunteer Fire Department Ordinance and Rules
IV. State Legislation for Fire Department Organization

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$10.00-$3.00-$2.00 EACH MONTH

PYRENE PRIZE LETTER CONTEST

THIS is a contest for firemen. Any fireman, whether a private or a chief, whether volunteer or paid, has the same chance to win in this easy contest designed to show what can be done with approved fire extinguishers. You have probably been present at numerous fires where approved fire extinguishers have been successfully used. It's the story we want, not letter writing ability. Get the facts down on paper and we will attend to any rewriting necessary to get the story into the space available in these columns.

The contest is sponsored cooperatively by the Pyrene Manufacturing Company of Newark, N. J., and VOLUNTEER FIREMEN to bring forth the lessons learned from actual fires of the value of fire extinguishers.

FIRST PRIZE—$10.00

PERCY M. SLACK, *Chief*,
Fire Department,
Charlestown, Indiana

Hot Shot!

About two weeks ago a new gasoline station opened here. The day it opened our truck answered a fire call there. A small boy had been shooting at birds with an air rifle. Instead of using a shot or "B-B" the boy inserted a match in the rifle and fired away at a pipe that went to an underground tank. The match ignited gasoline fumes coming from a nearby vent which was in use as a tank truck was unloading gasoline. When the fumes ignited, the driver of the tank truck became excited and started the truck while the discharge hose was still in the tank fill connection. The hose pulled loose from the truck and a stream of gasoline was sprinkled along the driveway. We had only one foam extinguisher but that was enough to bring the fire under control. The spilled gasoline was allowed to burn off the driveway.

SECOND PRIZE—$3.00

RICHARD WILSON, *First Assistant Chief*,
Fire Department,
Texas City, Texas

Power Station Fire

Some years ago I was a watch engineer for the Texas City Terminal Railroad power plant which furnished power for our city and oil companies. One evening about 8 P.M. a very bad electrical storm hit this plant setting fire to the large generator transformer switch in the basement. Just one little door led to the basement and the fire was like a roaring furnace. One of the plant firemen took two carbon tetrachloride extinguishers and two of us took two 2½-gallon foam extinguishers apiece and entered the basement. For a while, we appeared to be cut off from the small door which provided our only exit but we backed close to the door and got our last two extinguishers into action, smothering the blaze. Besides saving our own lives we saved thousands of dollars worth of property.

THIRD PRIZE—$2.00

W. H. LOVE,
Taft-Nelscott-Delake Fire District,
Oregon

Service Station Fire

One day my wife and I were driving down the hill into Taft, Oregon, when she suddenly yelled, "Look!" About a block away at a service station, across the street from another service station at which my brother works, an old automobile was covered with flames, and was being pushed out of the lubrication room. I turned into my brother's station and called for him to grab a fire extinguisher as he had not noticed the blaze. We each grabbed one of the carbon tetrachloride extinguishers kept in the station and dashed across the street. By that time the attendants also had their extinguishers in action and the blaze was put out in nothing flat, with no harm to the car or service station.

CONTEST RULES

1. Contestants in the Pyrene Prize Letter Contest must be members of their local fire department.
2. Letters are to describe actual experiences where an approved fire extinguisher of any make has saved lives or property.
3. Trade names may be used but will be deleted in publication. Publishers reserve the right to edit winning letters to permit publication.
4. Each contestant automatically vouches for the truth of the facts presented from his own or others' experience.
5. Only one letter may be submitted each month.
6. Letters must be legibly written in ink or typewritten on white paper, one side only. Preference will be given to letters not over 250 words in length.
7. Letters received after the 8th day of the month will be judged in following month's competition.
8. Monthly prizes in cash will be: 1st, $10.00; 2nd, $3.00; and 3rd, $2.00.
9. Address contest letters to Pyrene Prize Letter Contest, National Fire Protection Association, 60 Batterymarch St., Boston, Mass.

FIRE DEFENSE

Published by the N. F. P. A. 1941

Here is a book for all persons in public or private life interested in defense activities. It explains the problem of fire in war time covering air-set fires, bombs, sabotage, the activities involved in civilian defense, fire fighting, and the safeguarding of industrial production for defense.

Leading members of the N.F.P.A., specialists in their fields, have provided authoritative statements on various phases of the problem. There is a comprehensive report on British fire defense measures, including a bibliography of the best British publications on the subject. An expert of the F. B. I. discusses sabotage in one part of the book. Another part is contributed by the Director of Fire Services of the Civilian Defense Committee of the Canadian Province of Ontario. The nation's leading water works expert writes about water systems for protection. A section based on material developed by fire department drillmasters outlines the sort of training which auxiliary firemen should receive. Most important of all, the book tells what must be done to assure that fires, sabotage or accidental, will not interrupt the flow of material off production lines.

FIRE DEFENSE has been compiled on the theory that the best fire defense is a strong and intelligent offense against fire—such an offense requires practising scientific and time-tested methods. How these fundamentals apply to the problem of wartime fires is the story, completely told, in the latest addition to the publications of the N.F.P.A.

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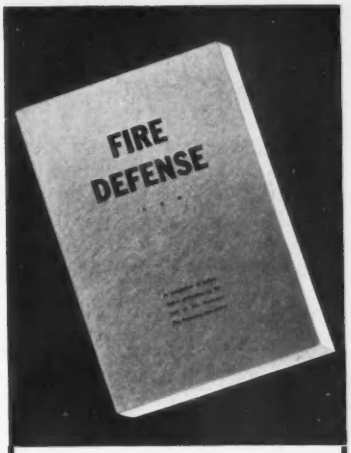

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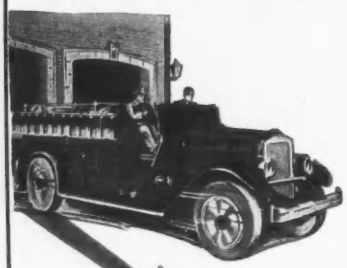
The HEART OF THE FIRE DEPARTMENT



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